AUTHOR INDEX

(D) Denotes Demonstration (T) Title only

Aizlewood E.A., Sutherland R.C. & Wakerley J.B. Changing characteristics of the milk-ejection reflex in the rat during late pregnancy, lactation and weaning. 55*P*

Al-Amood W.S. & Lewis D.M. Method for chronic stimulation of denervated muscle in the rat. (D) 10*P*

Allen D.G., Eisner D.A., Pirolo J.S. & Smith G.L. The relationship between intracellular calcium and contraction in calcium-overloaded ferret papillary muscles. 169

Anderson D.J., Hector M.P. & Linden R.W.A. The possible relation between mastication and parotid secretion in the rabbit. 19

Andres H., Bock R., Bridges R.J., Rummel W. & Schreiner J. Submucosal plexus and electrolyte transport across rat colonic mucosa. 301

Angel A. & Pollard C.E. A comparison of the effect of urethane on spontaneously active cells in the rat somatosensory cortex *in vivo* and *in vitro*. 33*P*

Armstrong D.M. & Trott Judy R. The corticonuclear projection of the *x* zone in lobule V B/C of the cat cerebellum – a combined electrophysiological and autoradiographic study. 30*P*

Ashmore J.F. Measurement of hair cell movements using a linear position detector. (D) 4*P*

Ashmore J.F. & Pitchford S. Evidence for electrical resonant tuning in hair cells of the frog amphibian papilla. 39*P*

Attwell D., Mobbs P., Tessier-Lavigne M. & Wilson M. Neurotransmitter-induced currents in bipolar cells isolated from the axolotl retina, recorded by whole-cell patch-clamping. 38*P*

Bachoo Manjit & Polosa Canio Properties of a sympatho-inhibitory and vasodilator reflex evoked by superior laryngeal nerve afferents in the cat. 183

Bagust J., Brown I.D. & Kerkut G.A. Use of microcomputers in undergraduate laboratory classes. (D) 5*P*

Barer G.R., Bee D. & Pallott D.J. Enlargement of the rat carotid body in chronic hypercapnia. 67*P*

Barnes P.R.J. & Dyball R.E.J. The importance of burst interval in determining vasopressin release from the phasically stimulated rat neurohypophysis. 51*P*

Bee D. *see* Barer G.R., Bee D. & Pallott D.J. Enlargement of the rat carotid body in chronic hypercapnia. 67*P*

Bell C., Jänig W., Kümmel H. & Xu H. Differentiation of vasodilator and sudomotor responses in the cat paw pad to preganglionic sympathetic stimulation. 93

Bennett T., Fellows I.W. & Macdonald I.A. Lack of effect of intravenously infused glucose on cardiovascular variables or plasma catecholamines in man. 72*P*

Bennett T., Gardiner S.M., Hebden R.A. & Macdonald I.A. Fluid and electrolyte status in Wistar rats following I.P. injection of streptozotocin. 74*P*

Berry S.C. & Lodge D. Correlating some biochemical, pharmacological and behavioural properties of dissociative anaesthetics and sigma opiates in the rat and cat. 34*P*

Bicknell R.J., Chapman C., Leng G. & Russell J.A. Vasopressin release following naloxone administration to rats treated chronically with intracerebroventricular (i.c.v.) morphine. 61*P*

Binder Marc D. & Osborn Connie E. Interactions between motor units and Golgi tendon organs in the tibialis posterior muscle of the cat. 199

Bloom S.R. & Edwards A.V. Pancreatic neuroendocrine responses to butyrate in conscious sheep. 281

Bock R. *see* Andres H., Bock R., Bridges R.J., Rummel W. & Schreiner J. Submucosal plexus and electrolyte transport across rat colonic mucosa. 301

Bolsover S.R. & Brown J.E. Calcium ion, an intracellular messenger of light adaptation, also participates in excitation of *Limulus* photoreceptors. 381

Bridges R.J. *see* Andres H., Bock R., Bridges R.J., Rummel W. & Schreiner J. Submucosal plexus and electrolyte transport across rat colonic mucosa. 301

Brimble A., Corrall R.J.M., Mattocks J., O'Hare J.P. & Roland J.M. Insulin and the renal response to volume expansion in man. 66*P*

BROOKS D. Single motor unit recording during locomotion in the cat. (D) 12*P*

BROWN I.D. *see* BAGUST J., BROWN I.D. & KERKUT G.A. Use of microcomputers in undergraduate laboratory classes. (D) 5*P*

BROWN J.E. *see* BOLSOVER S.R. & BROWN J.E. Calcium ion, an intracellular messenger of light adaptation, also participates in excitation of *Limulus* photoreceptors. 381

BURKE W., BURNE J.A. & MARTIN P.R. Selective block of Y optic nerve fibres in the cat and the occurrence of inhibition in the lateral geniculate nucleus. 81

BURNE J.A. *see* BURKE W., BURNE J.A. & MARTIN P.R. Selective block of Y optic nerve fibres in the cat and the occurrence of inhibition in the lateral geniculate nucleus. 81

BUSH B.M.H. & HEAD S.I. Proprioceptive reflex integration in the shore crab: an isolated ganglion-muscle-joint receptor preparation. (D) 25*P*

CALVERT J.E. & HARRIS J.P. Cortical magnification and the tilt after-effect in man. 36*P*

CAREY Hannah V., COOKE Helen J. & ZAFIROVA Maia Mucosal responses evoked by stimulation of ganglion cell somas in the submucosal plexus of the guinea-pig ileum. 69

CASTEELS R. & DROOGMANS G. Dependence on calcium of potassium- and agonist-induced changes in potassium permeability of rabbit ear artery. 151

CERVERO F. D.A.M.N.: A data analysis monitor for neurophysiology. (D) 2*P*

CHAMBERLAIN S. Single motor units in the rat. (D) 11*P*

CHAPMAN C. *see* BICKNELL R.J., CHAPMAN C., LENG G. & RUSSELL J.A. Vasopressin release following naloxone administration to rats treated chronically with intracerebroventricular (i.c.v.) morphine. 61*P*

CHAPMAN R.A., FOZZARD H.A., FRIEDLANDER I.R. & JANUARY C.T. Large changes in a^{i}_{Na} and a^{i}_{K} induced in isolated sheep Purkinje fibres by Na-pump inhibition and activation in the absence of external divalent cations. 78*P*

CLARK C.E. & MATTHEWS B. The effects of extracellular calcium concentration on axonal coupling in rat peripheral nerves. (D) 21*P*

CLARK R.G. & ROBINSON I.C.A.F. Growth hormone releasing factor (GRF) in mice of the mutant 'Little' strain. 60*P*

CLARKE G. & MACMILLAN Susan J. An electrophysiological demonstration of rat subfornical organ neurones projecting to the supraoptic nucleus. (D) 24*P*

CLARKE G., JUSS T.S. & WAKERLEY J.B. Effect of lesions of the medial raphe on e.e.g. patterns and reflex milk ejection in the urethane-anaesthetized rat. 57*P*

CLARKE R.W., MATTHEWS B. & ROGERS I.P. On the construction of oxygen micro-electrodes. (D) 19*P*

CLEAVE J., FLEMING P.J., LEVINE M.R. & LONG A.L. A mathematical study of the ventilatory response to a deep sigh. 68*P*

COAN E.J. & COLLINGRIDGE G.L. Ketamine and *N*-allylnormetazocine selectively inhibit an *N*-methyl-*D*-aspartate-receptor mediated component of synaptic transmission in rat hippocampal slices. 32*P*

COBBETT P. & HATTON G.I. Hypertonic saline drinking affects seminal vesicle weight in rats. 65*P*

COGHLAN B.A., MATTHEWS B. & PIGOTT R.W. A method for measuring facial asymmetry. (D) 20*P*

COLLINGRIDGE G.L. *see* COAN E.J. & COLLINGRIDGE G.L. Ketamine and *N*-allylnormetazocine selectively inhibit an *N*-methyl-*D*-aspartate-receptor mediated component of synaptic transmission in rat hippocampal slices. 32*P*

CONNELL L.A., DAVEY N.J. & ELLAWAY P.H. The synchronized firing of alpha and gamma motoneurones co-activated during the flexion reflex in the cat. 48*P*

COOK Alison J. & WOOLF Clifford J. Cutaneous receptive field and morphological properties of hamstring flexor α-motoneurones in the rat. 249

COOKE Helen J. *see* CAREY Hannah V., COOKE Helen J. & ZAFIROVA Maia Mucosal responses evoked by stimulation of ganglion cell somas in the submucosal plexus of the guinea-pig ileum. 69

CORNWALL J. *see* PHILLIPSON O.T. & CORNWALL J. Subcortical non-geniculate afferents to visual cortex in the rat. 37*P*

CORRALL R.J.M. *see* BRIMBLE A., CORRALL R.J.M., MATTOCKS J., O'HARE J.P. & ROLAND J.M. Insulin and the renal response to volume expansion in man. 66*P*

CRAWFORD A.C. & FETTIPLACE R. The mechanical properties of ciliary bundles of turtle cochlear hair cells. 359

DAMPNEY R.A.L & TAN E. Effects on blood pressure of microinjection of a GABA antagonist into vasopressor cell groups in the rostral medulla oblongata of the rabbit. 69*P*

DAVEY N.J. *see* CONNELL L.A., DAVEY N.J. & ELLAWAY P.H. The synchronized firing of alpha and gamma motoneurones co-activated during the flexion reflex in the cat. 48*P*

DE GROAT W.C., KAWATANI M. & RUTIGLIANO M. Ganglionic depolarization and enhancement of muscarinic ganglionic excitatory mechanisms in the cat by vasoactive intestinal polypeptide. 41*P*

DEBNAM E.S. & THOMPSON C.S. Effect of hyperglucagonaemia on membrane potential difference and autoradiographic localization of nutrient uptake by rat jejunum. 81*P*

DEBNAM E.S., MAZZANTI R. & JENKINS W.J. Effect of chronic ethanol ingestion on galactose absorption and enterocyte turnover in rat jejunum. 82*P*

DOBSON A., GLEED R.D. & MEYER R.E. Pulmonary blood flow redistribution in the anaesthetized horse. 86*P*

DRAPER N., FRAMPTON J. & MATTHEWS B. The effects of menthol on peripheral nerve conduction in the rat. (D) 22*P*

DROOGMANS G. *see* CASTEELS R. & DROOGMANS G. Dependence on calcium of potassium- and agonist-induced changes in potassium permeability of rabbit ear artery. 151

DUCHEN M.R. Excitation of motoneurones by GABA-mediated primary afferent depolarization in the mouse spinal cord *in vitro*. 45*P*

DYBALL R.E.J. *see* BARNES P.R.J. & DYBALL R.E.J. The importance of burst interval in determining vasopressin release from the phasically stimulated rat neurohypophysis. 51*P*

DYBALL R.E.J. & MASON W.T. Single ion channel recordings from nerve terminals of the rat neurohypophysis. 54*P*

DYER R.G. & MANSFIELD S. Neonatal exposure to testosterone potentiates electrically stimulated gonadotrophin secretion in adult female rats. 53*P*

EDGLEY S.A. & LIDIERTH M. Discharges of putative Golgi cells in the cerebellar cortex during locomotion in the cat. 29*P*

EDWARDS A.V. *see* BLOOM S.R. & EDWARDS A.V. Pancreatic neuroendocrine responses to butyrate in conscious sheep. 281

EISNER D.A. *see* ALLEN D.G., EISNER D.A., PIROLO J.S. & SMITH G.L. The relationship between intracellular calcium and contraction in calcium-overloaded ferret papillary muscles. 169

EISNER D.A. & VALDEOLMILLOS M. The mechanism of the increase of tonic tension produced by caffeine in sheep cardiac Purkinje fibres. 313

ELLAWAY P.H. *see* CONNELL L.A., DAVEY N.J. & ELLAWAY P.H. The synchronized firing of alpha and gamma motoneurones co-activated during the flexion reflex in the cat. 48*P*

ELMUBARAK M.H. & RANATUNGA K.W. The effects of denervation on post-natal changes in the isotonic shortening velocity of rat fast and slow-twitch muscles. 40*P*

EVANS M.H. Central cardiodeceleration and arterial blood pressure in the rabbit. 71*P*

FELLOWS I.W. *see* BENNETT T., FELLOWS I.W. & MACDONALD I.A. Lack of effect of intravenously infused glucose on cardiovascular variables or plasma catecholamines in man. 72*P*

FERGUSON A., LUND E.K., PICKERING M.G. & SMITH M.W. Lymphocyte-induced changes in disaccharidase expression by neonatal mouse enterocytes. 84*P*

FETTIPLACE R. *see* CRAWFORD A.C. & FETTIPLACE R. The mechanical properties of ciliary bundles of turtle cochlear hair cells. 359

FILLENZ Marianne & O'NEILL Robert D. Circadian changes in rat motor activity and forebrain dopamine release: effect of light reversal. 64*P*

FITZGERALD Maria The post-natal development of cutaneous afferent fibre input and receptive field organization in the rat dorsal horn. 1

FLEETWOOD-WALKER S.M. & HOPE P.J. A selective antinociceptive effect of the diencephalic dopamine-containing cell group, A11, on dorsal horn neurones in the rat. 47*P*

FLEMING P.J. *see* CLEAVE J., FLEMING P.J., LEVINE M.R. & LONG A.L. A mathematical study of the ventilatory response to a deep sigh. 68*P*

FOZZARD H.A. *see* CHAPMAN R.A., FOZZARD H.A., FRIEDLANDER I.R. & JANUARY C.T. Large changes in a^i_{Na} and a^i_K induced in isolated sheep Purkinje fibres by Na-pump inhibition and activation in the absence of external divalent cations. 78*P*

FRAMPTON J. *see* DRAPER N., FRAMPTON J. & MATTHEWS B. The effects of menthol on peripheral nerve conduction in the rat. (D) 22*P*

FRANCO F. & SNART R.S. Dexamethansone effects on glucose stimulated electrogenic ion transfer across isolated sections of rat intestine. 85*P*

FRIEDLANDER I.R. *see* CHAPMAN R.A., FOZZARD H.A., FRIEDLANDER I.R. & JANUARY C.T. Large changes in a^i_{Na} and a^i_K induced in isolated sheep Purkinje fibres by Na-pump inhibition and activation in the absence of external divalent cations. 78*P*

GARDINER S.M. *see* BENNETT T., GARDINER S.M., HEBDEN R.A. & MACDONALD I.A. Fluid and electrolyte status in Wistar rats following I.P. injection of streptozotocin. 74*P*

GIBSON Joan, LAURENT G.J. & MCANULTY R.J. Collagen metabolism during muscle growth in the chicken: evidence for increased collagen deposition associated with a decreased degradation of newly synthesized collagen as well as an increased systhesis rate. 80*P*

GLEED R.D. *see* DOBSON A., GLEED R.D. & MEYER R.E. Pulmonary blood flow redistribution in the anaesthetized horse. 86*P*

GOODY .R.S., GÜTH K., MAÈDA Y., POOLE K.J.V. & RAPP G. Time resolved X-ray diffraction measurements on *Lethocerus* fibrillar flight muscle following the photolytic release of ATP from 'caged-ATP'. 75*P*

GOSDEN R.G., HUMPHREYS Elizabeth M., JOHNSTON Valerie, LIDDLE Sandra & RUSSELL J.A. Morphine acts centrally to interrupt established parturition in rats. 59*P*

GROVUM W.L. & LEEK B.F. The sensory receptors of the sheep's forestomach responsible for reflex elicitation of parotid salivary secretion. 35*P*

GÜTH K. *see* GOODY .R.S., GÜTH K., MAÈDA Y., POOLE K.J.V. & RAPP G. Time resolved X-ray diffraction measurements on *Lethocerus* fibrillar flight muscle following the photolytic release of ATP from 'caged-ATP'. 75*P*

HANCOCK Jane Motor cortical discharges and locomotion in the cat. 28*P*

HARRIS J.P. *see* CALVERT J.E. & HARRIS J.P. Cortical magnification and the tilt after-effect in man. 36*P*

HARRISON S.M., LAMONT Christine & MILLER D.J. Hysteresis in the Ca *vs.* tension relationship of chemically 'skinned' rat cardiac muscle. 76*P*

HARRISON S.M. & MILLER D.J. Sodium-induced calcium release in chemically skinned rat cardiac fibres. 79*P*

HATTON G.I. *see* COBBETT P. & HATTON G.I. Hypertonic saline drinking affects seminal vesicle weight in rats. 65*P*

HEAD S.I. *see* BUSH B.M.H. & HEAD S.I. Proprioceptive reflex integration in the shore crab: an isolated ganglion-muscle-joint receptor preparation. (D) 25*P*

HEADLEY P.M. & WEST D.C. A simple device for interfacing a spike counter and an RML 380Z microcomputer. (D) 6*P*

HEADLEY P.M., PARSONS C.G. & WEST D.C. A set of 'BASIC' programs for the on-line analysis of neuronal spike-firing data. (D) 7*P*

HEADLEY P.M., O'SHAUGHNESSY C.T., PARSONS C.G. & WEST D.C. Kappa opiate-mediated reductions of spinal nociceptive reflexes in rats are reversed by low doses of intravenous naloxone. 44*P*

HEBDEN R.A. *see* BENNETT T., GARDINER S.M., HEBDEN R.A. & MACDONALD I.A. Fluid and electrolyte status in Wistar rats following I.P. injection of streptozotocin. 74*P*

HEBERT M.T. & MARSHALL Janice M. Responses of skeletal muscle microcirculation of the rat to baroreceptor stimulation. 70*P*

HECTOR M.P. *see* ANDERSON D.J., HECTOR M.P. & LINDEN R.W.A. The possible relation between mastication and parotid secretion in the rabbit. 19

HEWITT J.E. & SMITH M.W. Site of action and binding characteristics of triiodothyronine in adult rat jejunal enterocytes. 83*P*

HOLMAN R.B. & SNAPE B.M. Ethanol administration stimulates both the spontaneous and the K^+-induced release of endogenous dopamine from rat striatum *in vitro*. 63*P*

HOPE P.J. *see* FLEETWOOD-WALKER S.M. & HOPE P.J. A selective antinociceptive effect of the diencephalic dopamine-containing cell group, A11, on dorsal horn neurones in the rat. 47*P*

HUMPHREYS Elizabeth M. *see* GOSDEN R.G., HUMPHREYS Elizabeth M., JOHNSTON Valerie, LIDDLE Sandra & RUSSELL J.A. Morphine acts centrally to interrupt established parturition in rats. 59*P*

INGRAM C.D. & MASON W.T. Intracellular recordings from putative lactotrophs of bovine pituitary: modulation of spontaneous action potentials by regulators of prolactin secretion. 52*P*

JÄNIG W. *see* BELL C., JÄNIG W., KÜMMEL H. & XU H. Differentiation of vasodilator and sudomotor responses in the cat paw pad to preganglionic sympathetic stimulation. 93

JANUARY C.T. *see* CHAPMAN R.A., FOZZARD H.A., FRIEDLANDER I.R. & JANUARY C.T. Large changes in a^i_{Na} and a^i_K induced in isolated sheep Purkinje fibres by Na-pump inhibition and activation in the absence of external divalent cations. 78*P*

JENKINS W.J. *see* DEBNAM E.S., MAZZANTI R. & JENKINS W.J. Effect of chronic ethanol ingestion on galactose absorption and enterocyte turnover in rat jejunum. 82*P*

JOHNSTON Valerie *see* GOSDEN R.G., HUMPHREYS Elizabeth M., JOHNSTON Valerie, LIDDLE Sandra & RUSSELL J.A. Morphine acts centrally to interrupt established parturition in rats. 59*P*

JONES M.W., KILPATRICK I.C. & PHILLIPSON O.T. Selective modulation of cerebral cortical dopamine utilization by the mediodorsal nucleus of the rat thalamus. 62*P*

JONES S.P. & RIDGE R.M.A.P. The low safety factor of neuromuscular transmission in neonatal rats. (D) 14*P*

JUSS T.S. *see* CLARKE G., JUSS T.S. & WAKERLEY J.B. Effect of lesions of the medial raphe on e.e.g. patterns and reflex milk ejection in the urethane-anaesthetized rat. 57*P*

KAWATANI M. *see* DE GROAT W.C., KAWATANI M. & RUTIGLIANO M. Ganglionic depolarization and enhancement of muscarinic ganglionic excitatory mechanisms in the cat by vasoactive intestinal polypeptide. 41*P*

KERKUT G.A. *see* BAGUST J., BROWN I.D. & KERKUT G.A. Use of microcomputers in undergraduate laboratory classes. (D) 5*P*

KILPATRICK I.C. *see* JONES M.W., KILPATRICK I.C. & PHILLIPSON O.T. Selective modulation of cerebral cortical dopamine utilization by the mediodorsal nucleus of the rat thalamus. 62*P*

KIM Donghee & SMITH Thomas W. Effects of thyroid hormone on calcium handling in cultured chick ventricular cells. 131

KULLBERG R., OWENS J.L. & VICKERS J. Development of synaptic currents in immobilized muscle of *Xenopus laevis*. 57

KÜMMEL H. *see* BELL C., JÄNIG W., KÜMMEL H. & XU H. Differentiation of vasodilator and sudomotor responses in the cat paw pad to preganglionic sympathetic stimulation. 93

LAMONT Christine *see* HARRISON S.M., LAMONT Christine & MILLER D.J. Hysteresis in the Ca *vs.* tension relationship of chemically 'skinned' rat cardiac muscle. 76*P*

LAURENT G.J. *see* GIBSON Joan, LAURENT G.J. & MCANULTY R.J. Collagen metabolism during muscle growth in the chicken: evidence for increased collagen deposition associated with a decreased degradation of newly synthesized collagen as wel as an increased systhesis rate. 80*P*

LAWSON S.N. & WADDELL P.J. Intracellular recordings from rat primary afferent neurones with known peripheral and central conduction velocities *in vitro*. (D) 13*P*

LEE Kai S., MARBAN Eduardo & TSIEN Richard W. Inactivation of calcium channels in mammalian heart cells: joint dependence on membrane potential and intracellular calcium. 395

LEEK B.F. *see* GROVUM W.L. & LEEK B.F. The sensory receptors of the sheep's forestomach responsible for reflex elicitation of parotid salivary secretion. 35*P*

LEENDERTZ J.A. & WAKERLEY J.B. A simple program for generating post-stimulus time-interval histograms on the BBC microcomputer. (D) 27*P*

LENG G. *see* BICKNELL R.J., CHAPMAN C., LENG G. & RUSSELL J.A. Vasopressin release following naloxone administration to rats treated chronically with intracerebroventricular (i.c.v.) morphine. 61*P*

LEVINE M.R. *see* CLEAVE J., FLEMING P.J., LEVINE M.R. & LONG A.L. A mathematical study of the ventilatory response to a deep sigh. 68*P*

LEWIS D.M. *see* AL-AMOOD W.S. & LEWIS D.M. Method for chronic stimulation of denervated muscle in the rat. (D) 10*P*

LIDDLE Sandra *see* GOSDEN R.G., HUMPHREYS Elizabeth M., JOHNSTON Valerie, LIDDLE Sandra & RUSSELL J.A. Morphine acts centrally to interrupt established parturition in rats. 59*P*

LIDIERTH M. *see* EDGLEY S.A. & LIDIERTH M. Discharges of putative Golgi cells in the cerebellar cortex during locomotion in the cat. 29*P*

LINDEN R.W.A. *see* ANDERSON D.J., HECTOR M.P. & LINDEN R.W.A. The possible relation between mastication and parotid secretion in the rabbit. 19

LISNEY S.J.W. Regeneration of unmyelinated nerve fibres in the rat saphenous nerve. (D) 15*P*

LISNEY S.J.W. & POVER Carolyn M. The use of some sampling schemes to determine the number of myelinated nerve fibres in a unifascicular nerve trunk. (D) 16*P*

LIVINGSTON A. & MORRIS B. Intracerebroventricular injection of bestatin in rats gives antinociception and increases metenkephalin levels in the periaqueductal grey matter. 46*P*

LODGE D. *see* BERRY S.C. & LODGE D. Correlating some biochemical, pharmacological and behavioural properties of dissociative anaesthetics and sigma opiates in the rat and cat. 34*P*

LONG A.L. *see* CLEAVE J., FLEMING P.J., LEVINE M.R. & LONG A.L. A mathematical study of the ventilatory response to a deep sigh. 68*P*

LUMBERS Eugenie R., SMITH Francine G. & STEVENS A.D. Measurement of net transplacental transfer of fluid to the fetal sheep. 289

LUND E.K. *see* FERGUSON A., LUND E.K., PICKERING M.G. & SMITH M.W. Lymphocyte-induced changes in disaccharidase expression by neonatal mouse enterocytes. 84*P*

MCALLEN R.M. & WOOLLARD S. 'Tungsten plus glass' multibarrel electrodes. (D) 9*P*

MCANULTY R.J. *see* GIBSON Joan, LAURENT G.J. & MCANULTY R.J. Collagen metabolism during muscle growth in the chicken: evidence for increased collagen deposition associated with a decreased degradation of newly synthesized collagen as well as an increased systhesis rate. 80*P*

MACDONALD I.A. *see* BENNETT T., FELLOWS I.W. & MACDONALD I.A. Lack of effect of intravenously infused glucose on cardiovascular variables or plasma catecholamines in man. 72*P*

MACDONALD I.A. *see* BENNETT T., GARDINER S.M., HEBDEN R.A. & MACDONALD I.A. Fluid and electrolyte status in Wistar rats following I.P. injection of streptozotocin. 74*P*

MACMILLAN Susan J. *see* CLARKE G. & MACMILLAN Susan J. An electrophysiological demonstration of rat subfornical organ neurones projecting to the supraoptic nucleus. (D) 24*P*

MAŘDA Y. *see* GOODY .R.S., GÜTH K., MAŘDA Y., POOLE K.J.V. & RAPP G. Time resolved X-ray diffraction measurements on *Lethocerus* fibrillar flight muscle following the photolytic release of ATP from 'caged-ATP'. 75*P*

MANSFIELD S. *see* DYER R.G. & MANSFIELD S. Neonatal exposure to testosterone potentiates electrically stimulated gonadotrophin secretion in adult female rats. 53*P*

MARBAN Eduardo *see* LEE Kai S., MARBAN Eduardo & TSIEN Richard W. Inactivation of calcium channels in mammalian heart cells: joint dependence on membrane potential and intracellular calcium. 395

MARSHALL Janice M. *see* HEBERT M.T. & MARSHALL Janice M. Responses of skeletal muscle microcirculation of the rat to baroreceptor stimulation. 70*P*

MARTIN P.R. *see* BURKE W., BURNE J.A. & MARTIN P.R. Selective block of Y optic nerve fibres in the cat and the occurrence of inhibition in the lateral geniculate nucleus. 81

MASON W.T. *see* INGRAM C.D. & MASON W.T. Intracellular recordings from putative lactotrophs of bovine pituitary: modulation of spontaneous action potentials by regulators of prolactin secretion. 52*P*

MASON W.T. *see* DYBALL R.E.J. & MASON W.T. Single ion channel recordings from nerve terminals of the rat neurohypophysis. 54*P*

MATTHEWS B., PAMPLIN P.J. & SHELLIS R.P. The size and distribution of mechanoreceptive fields in cat dentine. (D) 17*P*

MATTHEWS B. & ROBINSON P.P. Sympathetic fibres in the facial nerve of the cat. (D) 18*P*

MATTHEWS B. *see* CLARKE R.W., MATTHEWS B. & ROGERS I.P. On the construction of oxygen micro-electrodes. (D) 19*P*

MATTHEWS B. *see* COGHLAN B.A., MATTHEWS B. & PIGOTT R.W. A method for measuring facial asymmetry. (D) 20*P*

MATTHEWS B. *see* CLARK C.E. & MATTHEWS B. The effects of extracellular calcium concentration on axonal coupling in rat peripheral nerves. (D) 21*P*

MATTHEWS B. *see* DRAPER N., FRAMPTON J. & MATTHEWS B. The effects of menthol on peripheral nerve conduction in the rat. (D) 22*P*

MATTOCKS J. *see* BRIMBLE A., CORRALL R.J.M., MATTOCKS J., O'HARE J.P. & ROLAND J.M. Insulin and the renal response to volume expansion in man. 66*P*

MAYER Mark L. A calcium-activated chloride current generates the after-depolarization of rat sensory neurones in culture. 217

MAZZANTI R. *see* DEBNAM E.S., MAZZANTI R. & JENKINS W.J. Effect of chronic ethanol ingestion on galactose absorption and enterocyte turnover in rat jejunum. 82*P*

MEYER R.E. *see* DOBSON A., GLEED R.D. & MEYER R.E. Pulmonary blood flow redistribution in the anaesthetized horse. 86*P*

MILLER D.J. *see* HARRISON S.M., LAMONT Christine & MILLER D.J. Hysteresis in the Ca *vs.* tension relationship of chemically 'skinned' rat cardiac muscle. 76*P*

MILLER D.J. *see* HAERISON S.M. & MILLER D.J. Sodium-induced calcium release in chemically skinned rat cardiac fibres. 79*P*

MITCHELL M.R., POWELL T., TERRAR D.A. & TWIST V.W. Influence of a change in stimulation rate on action potentials, currents and contractions in rat ventricular cells. 113

MOBBS P. *see* ATTWELL D., MOBBS P., TESSIER-LAVIGNE M. & WILSON M. Neurotransmitter-induced currents in bipolar cells isolated from the axolotl retina, recorded by whole-cell patch-clamping. 38*P*

MORRIS B. *see* LIVINGSTON A. & MORRIS B. Intracerebroventricular injection of bestatin in rats gives antinociception and increases metenkephalin levels in the periaqueductal grey matter. 46*P*

MORRIS R. Evidence for the possible involvement of γ-aminobutyric acid (GABA) in cutaneous and muscle-nerve-evoked inhibitions of responses of cat spinal neurones to noxious thermal stimulation. 42*P*

NGU M.C. Activation of enteric nerve pathways in the guinea-pig duodenum by cholecystokinin octapeptide and pentagastrin. 31

NIIJIMA Akira Blood glucose levels modulate efferent activity in the vagal supply to the rat liver. 105

NOBLE R. & RIDDELL J.S. Effects of descending influences on the high-threshold excitatory fields of post-synaptic dorsal column neurones in the chloralose-anaesthetized cat. 43*P*

NORTH R.A. & WILLIAMS J.T. On the potassium conductance increased by opioids in rat locus coeruleus neurones. 265

O'HARE J.P. *see* BRIMBLE A., CORRALL R.J.M., MATTOCKS J., O'HARE J.P. & ROLAND J.M. Insulin and the renal response to volume expansion in man. 66*P*

O'NEILL Robert D. *see* FILLENZ Marianne & O'NEILL Robert D. Circadian changes in rat motor activity and forebrain dopamine release: effect of light reversal. 64*P*

OSBORN Connie E. *see* BINDER Marc D. & OSBORN Connie E. Interactions between motor units and Golgi tendon organs in the tibialis posterior muscle of the cat. 199

O'SHAUGHNESSY C.T. *see* HEADLEY P.M., O'SHAUGHNESSY C.T., PARSONS C.G. & WEST D.C. Kappa opiate-mediated reductions of spinal nociceptive reflexes in rats are reversed by low doses of intravenous naloxone. 44*P*

OWENS J.L. *see* KULLBERG R., OWENS J.L. & VICKERS J. Development of synaptic currents in immobilized muscle of *Xenopus laevis*. 57

PAISLEY A.C. & SUMMERLEE A.J.S. Activity of preoptic neurones in conscious rabbits. 49*P*

PAISLEY A.C. & SUMMERLEE A.J.S. Rabbit preoptic neurones and luteinizing hormone release. 50*P*

PALLOTT D.J. *see* BARER G.R., BEE D. & PALLOTT D.J. Enlargement of the rat carotid body in chronic hypercapnia. 67*P*

PAMPLIN P.J. *see* MATTHEWS B., PAMPLIN P.J. & SHELLIS R.P. The size and distribution of mechanoreceptive fields in cat dentine. (D) 17*P*

PARSONS C.G. *see* HEADLEY P.M., PARSONS C.G. & WEST D.C. A set of 'BASIC' programs for the on-line analysis of neuronal spike-firing data. (D) 7*P*

PARSONS C.G. *see* HEADLEY P.M., O'SHAUGHNESSY C.T., PARSONS C.G. & WEST D.C. Kappa opiate-mediated reductions of spinal nociceptive reflexes in rats are reversed by low doses of intravenous naloxone. 44*P*

PHILLIPSON O.T. & CORNWALL J. Subcortical non-geniculate afferents to visual cortex in the rat. 37*P*

PHILLIPSON O.T. *see* JONES M.W., KILPATRICK I.C. & PHILLIPSON O.T. Selective modulation of cerebral cortical dopamine utilization by the mediodorsal nucleus of the rat thalamus. 62*P*

PICKERING M.G. *see* FERGUSON A., LUND E.K., PICKERING M.G. & SMITH M.W. Lymphocyte-induced changes in disaccharidase expression by neonatal mouse enterocytes. 84*P*

PIGOTT R.W. *see* COGHLAN B.A., MATTHEWS B. & PIGOTT R.W. A method for measuring facial asymmetry. (D) 20*P*

PIROLO J.S. *see* ALLEN D.G., EISNER D.A., PIROLO J.S. & SMITH G.L. The relationship between intracellular calcium and contraction in calcium-overloaded ferret papillary muscles. 169

PITCHFORD S. *see* ASHMORE J.F. & PITCHFORD S. Evidence for electrical resonant tuning in hair cells of the frog amphibian papilla. 39*P*

PLENDERLEITH M.B. Peripheral and central inputs to dorsal-horn neurones in the rat. (D) 3*P*

POLLARD C.E. *see* ANGEL A. & POLLARD C.E. A comparison of the effect of urethane on spontaneously active cells in the rat somatosensory cortex *in vivo* and *in vitro*. 33*P*

POLOSA Canio *see* BACHOO Manjit & POLOSA Canio Properties of a sympatho-inhibitory and vasodilator reflex evoked by superior laryngeal nerve afferents in the cat. 183

POOLE K.J.V. *see* GOODY .R.S., GÜTH K., MAÈDA Y., POOLE K.J.V. & RAPP G. Time resolved X-ray diffraction measurements on *Lethocerus* fibrillar flight muscle following the photolytic release of ATP from 'caged-ATP'. 75*P*

POULAIN D.A., TASKER J.G. & THEODOSIS D.T. A neuroanatomical study of sensory afferent input from the teat to the spinal cord, in lactating rats. 58*P*

POVER Carolyn M. *see* LISNEY S.J.W. & POVER Carolyn M. The use of some sampling schemes to determine the number of myelinated nerve fibres in a unifascicular nerve trunk. (D) 16*P*

POWELL T. *see* MITCHELL M.R., POWELL T., TERRAR D.A. & TWIST V.W. Influence of a change in stimulation rate on action potentials, currents and contractions in rat ventricular cells. 113

QAMAR M.I. & READ A.E. Non-invasive assessment of superior mesenteric artery blood flow resistance in man. 73*P*

QIU J.P. & WONG P.Y.D. Secretion of *p*-aminohippurate by the rat epididymis. 241

RANATUNGA K.W. *see* ELMUBARAK M.H. & RANATUNGA K.W. The effects of denervation on post-natal changes in the isotonic shortening velocity of rat fast and slow-twitch muscles. 40*P*

RAPP G. *see* GOODY .R.S., GÜTH K., MAÈDA Y., POOLE K.J.V. & RAPP G. Time resolved X-ray diffraction measurements on *Lethocerus* fibrillar flight muscle following the photolytic release of ATP from 'caged-ATP'. 75*P*

READ A.E. *see* QAMAR M.I. & READ A.E. Non-invasive assessment of superior mesenteric artery blood flow resistance in man. 73*P*

RICKARD M.J. & THOMAS R.C. Microcomputer system for simultaneous solution switching and data collection for experiments with ion-sensitive micro-electrodes. (D) 8*P*

RIDDELL J.S. *see* NOBLE R. & RIDDELL J.S. Effects of descending influences on the high-threshold excitatory fields of post-synaptic dorsal column neurones in the chloralose-anaesthetized cat. 43*P*

RIDGE R.M.A.P. *see* JONES S.P. & RIDGE R.M.A.P. The low safety factor of neuromuscular transmission in neonatal rats. (D) 14*P*

ROBINSON I.C.A.F. *see* CLARK R.G. & ROBINSON I.C.A.F. Growth hormone releasing factor (GRF) in mice of the mutant 'Little' strain. 60*P*

ROBINSON P.P. *see* MATTHEWS B. & ROBINSON P.P. Sympathetic fibres in the facial nerve of the cat. (D) 18*P*

ROGERS I.P. *see* CLARKE R.W., MATTHEWS B. & ROGERS I.P. On the construction of oxygen micro-electrodes. (D) 19*P*

ROLAND J.M. *see* BRIMBLE A., CORRALL R.J.M., MATTOCKS J., O'HARE J.P. & ROLAND J.M. Insulin and the renal response to volume expansion in man. 66*P*

RUBANYI Gabor M. & VANHOUTTE Paul M. Hypoxia releases a vasoconstrictor substance from the canine vascular endothelium. 45

RUMMEL W. *see* ANDRES H., BOCK R., BRIDGES R.J., RUMMEL W. & SCHREINER J. Submucosal plexus and electrolyte transport across rat colonic mucosa. 301

RUSSELL J.A. *see* GOSDEN R.G., HUMPHREYS Elizabeth M., JOHNSTON Valerie, LIDDLE Sandra & RUSSELL J.A. Morphine acts centrally to interrupt established parturition in rats. 59*P*

RUSSELL J.A. *see* BICKNELL R.J., CHAPMAN C., LENG G. & RUSSELL J.A. Vasopressin release following naloxone administration to rats treated chronically with intracerebroventricular (i.c.v.) morphine. 61*P*

RUTIGLIANO M. *see* DE GROAT W.C., KAWATANI M. & RUTIGLIANO M. Ganglionic depolarization and enhancement of muscarinic ganglionic excitatory mechanisms in the cat by vasoactive intestinal polypeptide. 41*P*

SCHLUE W.R. & THOMAS R.C. A dual mechanism for intracellular pH regulation by leech neurones. 327

SCHREINER J. *see* ANDRES H., BOCK R., BRIDGES R.J., RUMMEL W. & SCHREINER J. Submucosal plexus and electrolyte transport across rat colonic mucosa. 301

SHELLIS R.P. *see* MATTHEWS B., PAMPLIN P.J. & SHELLIS R.P. The size and distribution of mechano-receptive fields in cat dentine. (D) 17*P*

SILLAR K.T. & SKORUPSKI P. Phase-dependent central modulation of proprioceptive input to crayfish walking-leg motoneurones. (D) 26*P*

SKORUPSKI P. *see* SILLAR K.T. & SKORUPSKI P. Phase-dependent central modulation of proprioceptive input to crayfish walking-leg motoneurones. (D) 26*P*

SMITH Francine G. *see* LUMBERS Eugenie R., SMITH Francine G. & STEVENS A.D. Measurement of net transplacental transfer of fluid to the fetal sheep. 289

SMITH G.L. *see* ALLEN D.G., EISNER D.A., PIROLO J.S. & SMITH G.L. The relationship between intracellular calcium and contraction in calcium-overloaded ferret papillary muscles. 169

SMITH G.L. Creatine phosphate sensitivity of rigor tension in Triton 'skinned' rat ventricular trabeculae. 77*P*

SMITH M.W. *see* HEWITT J.E. & SMITH M.W. Site of action and binding characteristics of triiodothyronine in adult rat jejunal enterocytes. 83*P*

SMITH M.W. *see* FERGUSON A., LUND E.K., PICKERING M.G. & SMITH M.W. Lymphocyte-induced changes in disaccharidase expression by neonatal mouse enterocytes. 84*P*

SMITH Thomas W. *see* KIM Donghee & SMITH Thomas W. Effects of thyroid hormone on calcium handling in cultured chick ventricular cells. 131

SNAPE B.M. *see* HOLMAN R.B. & SNAPE B.M. Ethanol administration stimulates both the spontaneous and the K^+-induced release of endogenous dopamine from rat striatum *in vitro*. 63*P*

SNART R.S. *see* FRANCO F. & SNART R.S. Dexamethansone effects on glucose stimulated electrogenic ion transfer across isolated sections of rat intestine. 85*P*

STANDEN N.B., STANFIELD P.R. & WARD T.A. Properties of single potassium channels in vesicles formed from the sarcolemma of frog skeletal muscle. 339

STANFIELD P.R. *see* STANDEN N.B., STANFIELD P.R. & WARD T.A. Properties of single potassium channels in vesicles formed from the sarcolemma of frog skeletal muscle. 339

STEVENS A.D. *see* LUMBERS Eugenie R., SMITH Francine G. & STEVENS A.D. Measurement of net transplacental transfer of fluid to the fetal sheep. 289

SUMMERLEE A.J.S. *see* PAISLEY A.C. & SUMMERLEE A.J.S. Activity of preoptic neurones in conscious rabbits. 49*P*

SUMMERLEE A.J.S. *see* PAISLEY A.C. & SUMMERLEE A.J.S. Rabbit preoptic neurones and luteinizing hormone release. 50*P*

SUTHERLAND R.C. *see* AIZLEWOOD E.A., SUTHERLAND R.C. & WAKERLEY J.B. Changing characteristics of the milk-ejection reflex in the rat during late pregnancy, lactation and weaning. 55*P*

TAN E. *see* DAMPNEY R.A.L. & TAN E. Effects on blood pressure of microinjection of a GABA antagonist into vasopressor cell groups in the rostral medulla oblongata of the rabbit. 69*P*

TASKER J.G. *see* POULAIN D.A., TASKER J.G. & THEODOSIS D.T. A neuroanatomical study of sensory afferent input from the teat to the spinal cord, in lactating rats. 58*P*

TERRAR D.A. *see* MITCHELL M.R., POWELL T., TERRAR D.A. & TWIST V.W. Influence of a change in stimulation rate on action potentials, currents and contractions in rat ventricular cells. 113

TESSIER-LAVIGNE M. *see* ATTWELL D., MOBBS P., TESSIER-LAVIGNE M. & WILSON M. Neurotransmitter-induced currents in bipolar cells isolated from the axolotl retina, recorded by whole-cell patch-clamping. 38*P*

THEODOSIS D.T. *see* POULAIN D.A., TASKER J.G. & THEODOSIS D.T. A neuroanatomical study of sensory afferent input from the teat to the spinal cord, in lactating rats. 58*P*

THOMAS R.C. *see* SCHLUE W.R. & THOMAS R.C. A dual mechanism for intracellular pH regulation by leech neurones. 327

THOMAS R.C. *see* RICKARD M.J. & THOMAS R.C. Microcomputer system for simultaneous solution switching and data collection for experiments with ion-sensitive micro-electrodes. (D) 8*P*

THOMPSON C.S. *see* DEBNAM E.S. & THOMPSON C.S. Effect of hyperglucagonaemia on membrane potential difference and autoradiographic localization of nutrient uptake by rat jejunum. 81*P*

THOMSON A.M. & WEST D.C. Picrotoxin-induced epileptiform discharge in slices of rat cerebral cortex is not blocked by NMA antagonists. 31*P*

TROTT Judy R. *see* ARMSTRONG D.M. & TROTT Judy R. The corticonuclear projection of the *x* zone in lobule V B/C of the cat cerebellum – a combined electrophysiological and autoradiographic study. 30*P*

TSIEN Richard W. *see* LEE Kai S., MARBAN Eduardo & TSIEN Richard W. Inactivation of calcium channels in mammalian heart cells: joint dependence on membrane potential and intracellular calcium. 395

TWIST V.W. *see* MITCHELL M.R., POWELL T., TERRAR D.A. & TWIST V.W. Influence of a change in stimulation rate on action potentials, currents and contractions in rat ventricular cells. 113

VALDEOLMILLOS M. *see* EISNER D.A. & VALDEOLMILLOS M. The mechanism of the increase of tonic tension produced by caffeine in sheep cardiac Purkinje fibres. 313

VANHOUTTE Paul M. *see* RUBANYI Gabor M. & VANHOUTTE Paul M. Hypoxia releases a vasoconstrictor substance from the canine vascular endothelium. 45

VICKERS J. *see* KULLBERG R., OWENS J.L. & VICKERS J. Development of synaptic currents in immobilized muscle of *Xenopus laevis*. 57

WADDELL P.J. *see* LAWSON S.N. & WADDELL P.J. Intracellular recordings from rat primary afferent neurones with known peripheral and central conduction velocities *in vitro*. (D) 13*P*

WAKERLEY J.B. *see* LEENDERTZ J.A. & WAKERLEY J.B. A simple program for generating post-stimulus time-interval histograms on the BBC microcomputer. (D) 27*P*

WAKERLEY J.B. *see* AIZLEWOOD E.A., SUTHERLAND R.C. & WAKERLEY J.B. Changing characteristics of the milk-ejection reflex in the rat during late pregnancy, lactation and weaning. 55*P*

WAKERLEY J.B. *see* CLARKE G., JUSS T.S. & WAKERLEY J.B. Effect of lesions of the medial raphe on e.e.g. patterns and reflex milk ejection in the urethane-anaesthetized rat. 57*P*

WARD T.A. *see* STANDEN N.B., STANFIELD P.R. & WARD T.A. Properties of single potassium channels in vesicles formed from the sarcolemma of frog skeletal muscle. 339

WEST D.C. *see* HEADLEY P.M. & WEST D.C. A simple device for interfacing a spike counter and an RML 380Z microcomputer. (D) 6*P*

WEST D.C. *see* HEADLEY P.M., PARSONS C.G. & WEST D.C. A set of 'BASIC' programs for the on-line analysis of neuronal spike-firing data. (D) 7*P*

WEST D.C. *see* THOMSON A.M. & WEST D.C. Picrotoxin-induced epileptiform discharge in slices of rat cerebral cortex is not blocked by NMA antagonists. 31*P*

WEST D.C. *see* HEADLEY P.M., O'SHAUGHNESSY C.T., PARSONS C.G. & WEST D.C. Kappa opiate-mediated reductions of spinal nociceptive reflexes in rats are reversed by low doses of intravenous naloxone. 44*P*

WHEAL H.V. A microcomputer simulation of the Hodgkin–Huxley model for membrane current. (D) 23*P*

WILLIAMS J.T. *see* NORTH R.A. & WILLIAMS J.T. On the potassium conductance increased by opioids in rat locus coeruleus neurones. 265

WILSON M. *see* ATTWELL D., MOBBS P., TESSIER-LAVIGNE M. & WILSON M. Neurotransmitter-induced currents in bipolar cells isolated from the axolotl retina, recorded by whole-cell patch-clamping. 38*P*

WONG P.Y.D. *see* QIU J.P. & WONG P.Y.D. Secretion of *p*-aminohippurate by the rat epididymis. 241

WOOLF Clifford J. *see* COOK Alison J. & WOOLF Clifford J. Cutaneous receptive field and morphological properties of hamstring flexor α-motoneurones in the rat. 249

WOOLLARD S. *see* MCALLEN R.M. & WOOLLARD S. 'Tungsten plus glass' multibarrel electrodes. (D) 9*P*

WRIGHT D.M. Inhibition of reflex milk-ejection by substance P administered intrathecally to anaesthetized lactating rats. 56*P*

XU H. *see* BELL C., JÄNIG W., KÜMMEL H. & XU H. Differentiation of vasodilator and sudomotor responses in the cat paw pad to preganglionic sympathetic stimulation. 93

ZAFIROVA Maia *see* CAREY Hannah V., COOKE Helen J. & ZAFIROVA Maia Mucosal responses evoked by stimulation of ganglion cell somas in the submucosal plexus of the guinea-pig ileum. 69